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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/091,311 | 03/04/2002 | Diego Kaplan | UTL 00134 | 8151 |

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Kyocera Wirless Corp., Attn: Patent Department
PO Box 928289
San Diego, CA 92192-8289

| EXAMINER |
|---|
| TRUONG, LAN DAI T |

| ART UNIT | PAPER NUMBER |
|---|---|
| 2152 | |

DATE MAILED: 11/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

| | Application No. | Applicant(s) |
|---|---|---|
| | 10/091,311 | KAPLAN, DIEGO |
| **Office Action Summary** | Examiner | Art Unit | |
| | Lan-Dai Thi Truong | 2152 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>03</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on <u>07 September 2006</u>.

2a)☐ This action is **FINAL**.     2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *11-30* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *11-30* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>04 March 2002</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

## DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 09/07/2006 has been entered.

2. This action is response to communications: application, filed on 03/04/2002;

amendment filed 09/07/2006. Claims 11-30

3. The applicant's arguments file on 09/07/2006 have fully considered but they are moot

in view with new ground for rejections

## Claim rejections-35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness
rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or descry
> bed as set forth in section 102 of this title, if the differences between the subject matter sought to be
> patented and the prior art are such that the subject matter as a whole would have been obvious at the time
> the invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

**Claim 11 is rejected under 35 U.S.C 103(a) as being un-patentable over Lee (U.S.**

**6,590,887) in view of Mathai (U.S. 6,697,422)**

*In referring to claim 11:*

Lee discloses the invention substantially as claimed, including a system, which can be

implemented in a computer hardware or software code for optimal Short Message Service (SMS)

encoding in a wireless communications device having SMS capabilities, the system comprising:

An optimizing subsystem with an input to accept an SMS message, and an output to

supply an optimizing signal: Lee discloses communication system for transmitting short message

service over a network. The communication system includes "an encoder/decoder" which is

equivalent to "an optimizing subsystem" includes an input to accept signals from an antenna and

an output for sending encoded signals: (column 2, lines 30-35, 40-45)

However, Lee does not explicitly disclose an input to accept an evaluation control signal

and supplying an optimizing signal responsive to the message encoding requirements prior to

encoding of the message; an encoding subsystem with an input to accept the SMS message, an

input to accept the optimizing signal, and an output to supply the SMS message in a format

responsive to the optimizing signal

In analogous art, Mathai discloses encoding system provides a plurality of encoding

levels for encoding "control messages" which is equivalent to "SMS message." The transmitting

control message is encoded via a selected encoding level from a plurality of encoding levels.

Mathai also discloses method for evaluating in order to "select an optimal encoded format"

which is equivalent to "optimizing signal" based upon conditions of channels: (abstract; column

5, lines 1-42; column 6, lines 42-67)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the

invention was made to combine Mathai's ideas of evaluating and selecting optimal format for

encoding with Lee's system in order to provide an efficient communication system such as

optimizing traffic channel data due to decrease loss of traffic channel data, see (column 2, lines 1-10)

**Claims 12-17 are rejected under 35 U.S.C 103(a) as being un-patentable over Lee-Mathai in view of Moskowitz et al (U.S. 5,249,220)**

*In referring to claim 12:*

Lee-Mathai discloses the invention substantially as disclosed in claim 11, but does not explicitly teach encoding format parameters including the number of bits needed to represent charaters

In analogous art, Moskowitz discloses encoding format must be identified while evaluating and selecting encoding format such as five bits, six bits ...ect. the smallest number of binary bits is chose to represent the message: column 12, lines 1-9; column 13, lines 34-45)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine Moskowitz's ideas of evaluating and selecting the encoding format for wireless transmitted message with Lee-Mathai' s system in order to provide selecting the fewest bits encoding format for messages, see (Moskowitz: column 12, lines 1-9)

*In referring to claim 13:*

In addition to rejection in claim 12, Lee-Mathai- Moskowitz further discloses optimizing subsystem evaluates the SMS message to identify available encoding formats usable for encoding the characters, wherein the optimizing subsystem determines a memory usage requirement, wherein the optimizing subsystem selects as the optimal encoding format with a minimum memory usage, and wherein the optimizing subsystem supplies the identity of the optimal encoding format in the optimizing signal: Moskowitz discloses the encoding format is

determined such as five bits, six bits ...ect. the smallest number of binary bits is chose to

represent the message: (column 12, lines 1-9; column 13, lines 34-45)

### *In referring to claim 14:*

This claim is rejected under rationale of claim 11

### *In referring to claim 15:*

In addition to rejection in claim 14, Lee-Mathai- Moskowitz further discloses a memory

circuit has an input to accept the encoded SMS message for storage and an output to supply the

stored SMS message: Lee discloses RAM and ROM to store predefined messages. The message

read from the memory and displays on the display: (column 1, lines 42-45, lines 22-45; column

3, lines 25-52)

### *In referring to claim 16:*

In addition to rejection in claim 15, Lee-Mathai- Moskowitz further discloses the wireless

device is Mobile Origination enable and optimizing subsystem accepts the SMS message from a

user interface: Lee discloses the controller receives the message that the user inputs from the

display: (column 3, lines 47-52)

The transceiver has an input to accept the stored SMS message from the memory for

airlink transmission: Lee discloses the stored predefined messages will be transmitted to between

digital mobile communication terminal, so there must be exist an airlink communication:

(column 2, lines 55-59).

### *In referring to claim 17:*

In addition to rejection in claim 16, Lee-Mathai- Moskowitz further discloses wherein the

optimizing subsystem accepts the SMS message from a transceiver and a user interface has an

input to accepts the stored message for presentation: Lee disclose method of decoding encoded

messages and displaying messages on the display: (column 2, lines 22-52)

**Claim 18 is rejected under 35 U.S.C 103(a) as being un-patentable over Lee-Mathai-Moskowitz in view of Wolf et al. (U.S. 5,844,922)**

*In referring to claim 18:*

Lee-Mathai- Moskowitz discloses the invention substantially as disclosed in claim 11, but

does not explicitly teach selecting the optimal encoding format includes selecting seven-bit

ASCII as a default optimal encoding format. However, in the same field of endeavor, with an

analogous art, Wolf discloses a constraint length of 7 is typical in encoding format, see (Wolf:

column 1, lines 44-46; column 2, lines 3-12; column 3, lines 15-30; column 13, lines 63-64).

It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to combine Wolf's ideas of using encoding format such as a constraint

length of 7 with Lee-Mathai- Moskowitz' s system in order to perform higher rate for encoding

and decoding, see (Wolf: column 4, lines 48-54).

**Claims 19-21, 23-24 and 28-30 are rejected under 35 U.S.C 103(a) as being un-patentable over Moskowitz et al (U.S. 5,249,220) in view of Mathai (U.S. 6,697,422)**

*In referring to claim 19:*

Moskowitz discloses the invention substantially as claimed, including a method, which

can be implemented in a computer hardware or software code for encoding a Short Message

Service (SMS) message, the method comprising:

Encoding a SMS message using a SMS encoding format to generate an encoded SMS

message: Moskowitz discloses a method of evaluating and selecting the fewest binary bit

encoding format as a predetermined format for encoding transmitting message: (Moskowitz:

column 12, lines 1-10, lines 15-40; column 13, lines 40-45; column 7, lines 60-67; column 11,

lines 67)

However, Moskowitz does not explicitly disclose prior to encoding the SMS message,

selecting the SMS encoding format based on a wireless device resource requirement of the

encoded SMS message

In analogous art, Mathai discloses encoding system provides a plurality of encoding

levels for encoding "control messages" which is equivalent to "SMS message." The transmitting

control message is encoded via a selected encoding level from a plurality of encoding levels.

Mathai also discloses method for evaluating in order to "select an optimal encoded format"

which is equivalent to "optimizing signal" based upon conditions of channels: (abstract; column

5, lines 1-42; column 6, lines 42-67)

Thus, it would have been obvious to a person of ordinary skill in the art at the time the

invention was made to combine Mathai's ideas of evaluating and selecting optimal format for

encoding with Moskowitz's system in order to provide an efficient communication system such

as optimizing traffic channel data due to decrease loss of traffic channel data, see (column 2,

lines 1-10)

### In referring to claims 20-21, 28-29:

This claim is rejected under rationale of claim 19

### In referring to claims 24 and 30:

In addition to rejection in claims 20 and 29, Moskowitz-Mathai further discloses

determining a memory usage requirement of the SMS message: Moskowitz discloses a method

of evaluating and selecting the fewest "binary bit" which is equivalent to "memory usage"

encoding format as a predetermined format for transmitted message: (column 12, lines 1-10,

lines 15-40; column 13, lines 40-45; column 7, lines 60-67; column 11, lines 67)

### *In referring to claim 23:*

In addition to rejection in claim 21, Moskowitz-Mathai further discloses determining a

number of bits need to represent characters in the available format: Moskowitz discloses a

method of evaluating and selecting the fewest "binary bit" which is equivalent to "memory

usage" encoding format as a predetermined format for transmitted message: (column 12, lines 1-

10, lines 15-40; column 13, lines 40-45; column 7, lines 60-67; column 11, lines 67)


**Claim 25 is rejected under 35 U.S.C 103(a) as being un-patentable over Moskowitz-**

**Mathai in view of Wolf et al. (U.S. 5,844,922)**

### *In referring to claim 25:*

Moskowitz-Mathai discloses the invention substantially as disclosed in claim 20, but does

not explicitly teach selecting the optimal encoding format includes selecting seven-bit ASCII as

a default optimal encoding format

In analogous art, Wolf discloses method of using length of 7 bit as encoding format:

column 1, lines 44-46; column 2, lines 3-12; column 3, lines 15-30; column 13, lines 63-64).

It would have been obvious to a person of ordinary skill in the art at the time the

invention was made to combine Wolf's ideas of using encoding format such as a constraint

length of 7 with Moskowitz-Mathai' s system in order to perform higher rate for encoding and

decoding, see (Wolf: column 4, lines 48-54)

**Claims 26-27 are rejected under 35 U.S.C 103(a) as being un-patentable over Moskowitz-Mathai in view of King et al. (U.S. 5,859,594)**

*In referring to claims 26-27:*

Moskowitz-Mathai discloses the invention substantially as disclosed in claim 19, but does not explicitly teach receiving SMS message at wireless device via user interface

In analogous art, King discloses "paging terminal" which is equivalent to "wireless device" receives messages via interface: (abstract; column 1, lines 15-27)

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine King's ideas of using receiving SMS via wireless device interface with Moskowitz-Mathai' s system in order to provide conveniences for users so they can detect if message coming

**Claim 22 is rejected under 35 U.S.C 103(a) as being un-patentable over Moskowitz-Mathai in view of Murray et al. (U.S. 6,539,118)**

*In referring to claim 22:*

Moskowitz-Mathai discloses the invention substantially as disclosed in claim 21, but does not explicitly teach evaluating an English-language SMS message in ISO Latin 1, and Unicode formats as usable; and, determining the number of bits needed to represent characters in ISO Latin 1, and Unicode formats

However, in the same field of endeavor, with an analogous art, Murray discloses a system and method for evaluating character sets of message containing a plurality of character sets. Murray discloses a communication system includes "character table bank" stored in the system storage. "Characters table bank" contains many different code formats such as Unicode, "ISO-

8859-1" which is equivalent to "ISO Latin 1" and ASCII. Through out the "characters table

bank", the communication system performs searching, evaluation and selecting the best code

format such as for faster processing, see (Murray: column 1, lines 65-67; column 2, lines 3-30;

column 4, lines 32-35, 42-46, 61-67; column 5, lines 16-24; column 6, lines 60-67; column 7,

lines 1-4).

Therefore, It would have been obvious to a person of ordinary skill in the art at the time

the invention was made to combine Murray's ideas of code message in different code formats

such as Unicode, "ISO-8859-1" with Moskowitz-Mathai's system in order to determine which

code format is the best fit based on the evaluation technology of the communication system, see

(Murray: abstract, lines 7-12).

The prior art made of record and not relied upon is considered pertinent to applicant's

disclosure. The following patents and publications are cited to further show the state of the art

with respect to "System and method for optimal short message service (SMS) encoding in a

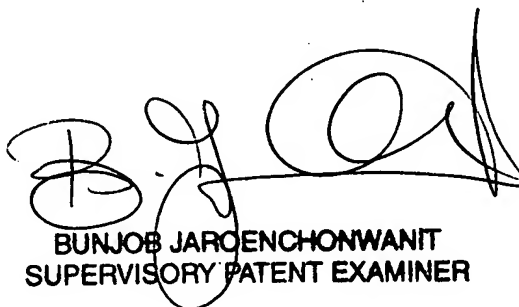wireless communications device": 20020160818; 5729610; 6496543; 20030065802

## Conclusions

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Lan-Dai Thi Truong whose telephone number is 571-272-7959.

The examiner can normally be reached on Monday- Friday from 8:30am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Bunjob A. Jaroenchonwanit can be reached on 571-272-3913. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

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11/07/2006

BUNJOB JAROENCHONWANIT
SUPERVISORY PATENT EXAMINER